





## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

Lester F. Lau

App. No.:

10/774,706

Conf. No.:

2022

Filing Date:

February 9, 2004

Title:

CCN1 TRANSGENIC ANIMALS

Art Unit:

1638

Examiner:

Not yet assigned

**CERTIFICATE OF MAILING** 

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10/14/2004

Date

Kate Berezuskaya, Ph.D.

Registration No. <u>53,984</u>

## INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 C.F.R. §§ 1.56, 1.97 and 1.98

MAIL STOP AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## Dear Sir:

In compliance with 37 C.F.R. § 1.97 and the continuing duty of disclosure under 37 C.F.R. § 1.56, Applicant calls to the attention of the Examiner references listed on the attached Forms PTO/SB/08A and PTO/SB/08B. Applicant also submits herewith copies for the listed references.

This Information Disclosure Statement is not intended to be an admission that a search has been made, that other relevant art does not exist, or that any of the information disclosed herein constitutes art under 35 U.S.C. §102 or §103.

The Information Disclosure Statement is submitted pursuant to 37 C.F.R. § 1.97 (b) (3) before the mailing of a first Office action on the merits for the above-specified patent application. Therefore, we believe no fee is due with the submission of this Information Disclosure Statement. However,

Application No.: 10/774,706 Docket No.: 05031.0008.NPUS01

should any fees be deemed necessary in connection with the filing of this document, the Commissioner is hereby authorized to deduct any such fees from our Deposit Account No. 08-3038.

Respectfully submitted,

HOWREY SIMON ARNOLD & WHITE, LLP

Kate G. Berezutskaya, Ph.D.

Registration No.: 53,984 Customer No.: 22930

Dated: October 14, 2004

HOWREY SIMON ARNOLD & WHITE, LLP 321 N. Clark Street, Suite 3400 Chicago, IL 60661 (312) 595-1239 (main) (312) 846-5622 (direct) (312) 264 0364 (fax)

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

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Sub	stitute for	form 144	9A/PTO	Complete if Known		
IN	FORMA	TION	DISCLOSURE	Application Number	10/774,706	
			APPLICANT	Filing Date	February 9, 2004	
				First Named Inventor	Lester F. Lau	
,		• .		Group Art Unit	1638	
(use as many sheets as necessary)			necessary)	Examiner Name	Not Yet Assigned	
Sheet	1	of	4	Attorney Docket Number	05031.0008.NPUS01	

	U.S. PATENT DOCUMENTS							
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines,			
Initials*	No. 1	Number – Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear			
	A1	6,632,979	10-14-2003	Erickson et al.				
	A2	6,413,735	07-02-2002	Lau				
	A3	6,632,978 B1	10-14-2003	Kaslin et al.				
	A4	6,630,613	10-07-2003	Xu et al.				

-		FOREI	GN PATENT DO	OCUMENTS		
Examiner Initials*	Cite No. 1	Foreign Patent Document  Country Code <sup>3</sup> –Number <sup>4</sup> – Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
·	<b>B</b> 1	WO 01/55210	08-02-2001	Lau		

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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

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Programment of the patent document, by the two-letter code (WIPO Standard ST. 3).

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.

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			APPLICANT	Filing Date	February 9, 2004	
21				First Named Inventor	Lester F. Lau	
		1 4 .		Group Art Unit	1638	
(use as many sheets as necessary)			necessary)	<b>Examiner Name</b>	Not Yet Assigned	
Sheet	2	of	4	Attorney Docket Number	05031.0008.NPUS01	

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	T <sup>2</sup>
	C1	Meisner et al (1998). Atrioventricular septal defect. Pediatr Cardiol. 19(4):276-81.	
-	C2	Gelb et al. (1997). Molecular genetics of congenital heart	
		disease. Curr Opin Cardiol. 12(3):321-8.	
	C3	Cousineau et al. (1994). Linkage analysis of autosomal	
		dominant atrioventricular canal defects: exclusion of	
		<b>chromosome 21.</b> Hum Genet. 93(2):103-8.	
	C4	Markwald et al. (2000). Conotruncal anomalies in the trisomy	
		16 mouse: an immunohistochemical analysis with emphasis on	
		the involvement of the neural crest. Anat Rec. 260(3):279-93.	•
	C5	Disegni et al. (1985). Two-dimensional echocardiography in	
		detection of endocardial cushion defect in families. Am J	
		Cardiol. 1(55):1649-52.	
	C6	Kumar et al. (1994). Confirmation of linkage of supravalvular	
		aortic stenosis to the elastin gene on chromosome 7q. Am J	
		Cardiol. 74(12):1281-3.	
	C7	Sheffield et al. (1997). Identification of a complex congenital	
		heart defect susceptibility locus by using DNA pooling and	
		shared segment analysis. Hum Mol Genet. 6(1):117-21.	
	C8	Jay et al. (1997). The human growth factor-inducible	
		immediate early gene, CYR61, maps to chromosome 1p.	
	<u>C0</u>	Oncogene. 14(14):1753-7.	
	C9	Lau & Lam (1999). The CCN family of angiogenic regulators:	
-	C10	the integrin connection. Exp Cell Res. 248(1):44-57.	
		Lau & Nathans (1985). Identification of a set of genes expressed	
		during the G0/G1 transition of cultured mouse cells. EMBO J. 4(12):3145-51.	
	L	T(14).3173-31.	

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IN	FORM.	ATION	DISCLOSURE	Application Number	10/774,706	
			APPLICANT	Filing Date	February 9, 2004	
	STATEMENT DI MITERIALI			First Named Inventor	Lester F. Lau	
		_1		Group Art Unit	1638	
(use as many sheets as necessary)		necessary)	<b>Examiner Name</b>	Not Yet Assigned		
Sheet	3	of	4	Attorney Docket Number	05031.0008.NPUS01	

	C11	Kireeva et al. (1996). Cyr61, a product of a growth factor-	
		inducible immediate-early gene, promotes cell proliferation,	
		migration, and adhesion. Mol Cell Biol. 16(4):1326-34.	
	C12	Babic et al. (1998). CYR61, a product of a growth factor-	
		inducible immediate early gene, promotes angiogenesis and	
		tumor growth. Proc Natl Acad Sci U S A. 95(11):6355-60.	
	C13	Chen et al. (2001). Heart disease, family history and physical	
		activity. Health Rep. 12(4):23-32.	
	C14	Tam (1998). Postimplantation mouse development: whole	
		embryo culture and micro-manipulation. Int J Dev Biol	
		42:895-902	
	C15	Beckman (1997). Mechanisms of amino acid supply to the rat	
		conceptus in normal and abnormal development. Reproductive	
		Toxicology, 11. No. 4: 595-599.	
	C16	` '	
		embryo culture and potential impact on future animal	
		biotechnology. Anim Reprod Sci. 79:171-90.	
	C17	Friedrich et al. (1991). Promoter traps in embryonic stem cells:	
		a genetic screen to identify and mutate developmental genes in	
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	C18	Mansour et al. (1988). Disruption of the proto-oncogene int-2 in	
		mouse embryo-derived stem cells: a general strategy for	
		targeting mutations to non-selectable genes. Nature 336:348-	
<u> </u>	C10	J. at al. (1992). Toward Madadian of the DNA	
	C19	Li et al. (1992). Targeted Mutation of the DNA	
		Methyltransferase Gene Results in Embryonic Lethality. Cell 69:915-926	
	C20	Suri et al. (1998). Increased vascularization in mice	
	C20	overexpressing angiopoietin-1. Science 282:468-471	
	C21	Asahara et al. (1998). Tie2 receptor ligands, angiopoietin-1 and	
	C21	angiopoietin-2, modulate VEGF-induced postnatal	
		neovascularization. Circ. Res. 83:233-240	
		HEUVASCUIAI IZAUUII. CIIC. RES. 03.233-240	

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Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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			APPLICANT	Filing Date	February 9, 2004		
01				First Named Inventor Lester F. Lau			
(		-1		Group Art Unit	1638		
(use as many sheets as necessary)			necessary)	Examiner Name	Not Yet Assigned		
Sheet	4	of	4	Attorney Docket Number	05031.0008.NPUS01		

	T 1 0 26 1 11 (4005) 25 1 1 1 1 1 1 1	
C22	Eisenberg & Markwarld. (1995). Molecular regulation of	
	atrioventricular valvuloseptal morphogenesis. Circ Res.	
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C23	Chen, Mo et al. (2001). The angiogenic factor Cyr61 activates a	
	genetic program for wound healing in human skin fibroblasts.	
	J Biol Chem. 276(50):47329-37.	
C24	Kireeva, Mo et al. (1996). Cyr61, a product of a growth factor-	
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	migration, and adhesion. Mol Cell Biol. 16(4):1326-34.	
C25	Cook (2001). The spectrum of fetal cardiac malformations.	
	Cardiol Young 11:97-110	
C26	De la Cruz et al. (2001). Living morphogenesis of the ventricles	
	and congenital pathology of their component parts. Cardiol	
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C27	Smallhorn (2001). Cross-Sectional Echocardiographic	:
	Assessment of Atrioventricular Septal Defect: basic	
	morphology and preoperative risk factors. Echocardiography: a	
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C28	Vaughan & Basson (2001). Molecular Determinants of Atrial	
	and Ventricular Septal Defects and Patent Ductus Arteriousus.	
	American J of Medical Genetics 97:304-309.	
C29	Koblizek et al. (1998). Angiopoietin-1 induces sprouting	
	angiogenesis in vitro. Curr Biol. 8(9):529-32.	

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